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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/538,790

06/10/2005

Motoyuki Tagashira

TAGASHIRA2

4287

1444 7590 05/20/2008
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EXAMINER

RAO, SAVITHA M

ART UNIT

PAPER NUMBER

4131

MAIL DATE

DELIVERY MODE

05/20/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/538,790	Applicant(s) TAGASHIRA ET AL.	
	Examiner SAVITHA RAO	Art Unit 4131	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 May 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) 2-5 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims 1-5 are pending and are subject of this office action. Claims 2-5 are withdrawn from consideration as being drawn to non-elected invention. Claim 1 is under consideration for the instant office action.

Priority information

This application claims foreign priority to Japan 2002-360424 dated 12/12/2002. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Election/Restrictions

Applicant's election with traverse of Group 1 (claims 1) in the reply filed on 05/09/2008 is acknowledged. The traversal is on the ground(s) that all of claims 2-5 depend directly or indirectly on claim 1 and accordingly, the special technical features that exist in claim 1 is present in claims 2-5.

Examiner respectfully disagrees and the applicant's argument is not deemed persuasive. Instant claims 2-5 do not in fact depend from claim 1, which is a process. They refer back to claim 1 but are drawn to different inventions other than that claimed in claim 1. Examiner would also like to point out that there is lack of unity among these claims since what the applicant claims as special technical feature which is the process of producing hop bract polyphenol as claimed in claim 1 is known in the art (Motoyuki et.al *Biosci. Biotech. Biochem.* 61 (2), 332-335 (1997). Therefore groups I to IV are not

unified by a special technical feature. Accordingly the restriction requirement is still deemed proper and is therefore made FINAL.

Instant claims 2-5 are withdrawn from consideration. Claim 1 is under consideration in the instant office action.

Claim Rejections - 35 USC § 102(b)

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless —(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Motoyuki et al (Biosci. Biotech. Biochem. 61 (2) 332-335 (1997))

Instant claims 1 is drawn to a process for producing hop bract polyphenol extracting hop bract with an aqueous alcohol solution, concentrating the extract to give a residual alcohol concentration of 2 v/v% or less, and purifying the concentrate.

Motoyuki discloses preparation of the hop bract polyphenols where the bracts were extracted with 2 liters of 30% ethanol aqueous solution. After filtration and evaporation of the ethanol, the extract was lyophilized to give a light-green residue. The residue was purified by dissolving in 1 liter of distilled water and passing it through a styrene-divinylbenzene resin column, for 60 minutes. The column was washed with water and polyphenol was eluted with ethanol aqueous solution stepwise. After evaporation of the ethanol, each fraction was lyophilized to give light-brown powder of hop bract polyphenol (page 332, Materials and Methods, left column, last paragraph).

With regards to the instant claim 1 limitation wherein the residual alcohol concentration was 2% v/v before the final purification method, Motoyuki is silent as to the final alcohol content of his preparation. However, since the procedure for preparation of the Hop Bract polyphenols is identical to the instantly claimed method and additionally, Motoyuki's process involves evaporation and lyophilization of the extracted polyphenol before it is purified, any traces of alcohol if present would be as low as or lower than that instantly claimed. Absence of any evidence to the contrary, prior art hop bract polyphenol would exhibit the same properties as that claimed in the instant claim 1. It is incumbent upon the applicant to provide evidence or comparative data to the contrary.

Accordingly claim 1 is anticipated by Motoyuki et al.

Claims 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Kriesl E (DE 19939350,(Abstract)

Kriesl teaches preferred method for extraction of xanthohumol (a polyphenol) from hop bracts by subjecting the hop product to a pre-extraction with water. The organic solvent is aqueous alcohol. The initially obtained extract is processed to a paste and this is mixed with a starch based carrier, especially a maltodextrin solution, and the mixture is spray dried to a powder. The dried hops are further extracted with deionized water and than with aqueous ethanol, the separated ethanol extract is vacuum concentrated to a paste to obtain 5-10% xanthohumol. The paste is mixed with maltodextrin and spray dried to a powder (Pharmaceuticals, Preferred method section).

With regards to the instant claim 1 limitation wherein the residual alcohol concentration was 2% v/v before the final purification method, Kriesl is silent as to the final alcohol content of his preparation. However, since the procedure for preparation of the Hop Bract polyphenols is identical to the instantly claimed method and additionally, Kriesl's process involves evaporation and lyophilization of the extracted polyphenol before it is purified, any traces of alcohol if present would be as low as or lower than that instantly claimed. Absence of any evidence to the contrary hop bract polyphenol taught by Kriesl would exhibit the same properties as that claimed in the instant claim 1. It is incumbent upon the applicant to provide evidence or comparative data to the contrary.

Accordingly claim 1 is anticipated by Kriesl.

Conclusion

Claims 1 is rejected. No claims are allowed

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SAVITHA RAO whose telephone number is (571)270-5315. The examiner can normally be reached on Mon-Fri 8 am to 5 pm..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Janet Andres can be reached on 571-272-0867 and Cecilia Tsang can be reached on 571-272-0567. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1625

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SAVITHA RAO
Examiner
Art Unit 4131

/Janet L. Andres/
Supervisory Patent Examiner, Art Unit 4131